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| | APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
| | 14/166,906 | 01/29/2014 | David Levi | 8385-US | 7852 | |
| | | 054 7590 08/24/2020 ECHES PATENTS | | | EXAMINER | |
| | HaArba"a Towe | | | REYES ORTIZ, HECTOR E | | |
| | - 1 - 1 - 1 - 1 - 1 - 1 | TEL AVIV, 6473925 | | | PAPER NUMBER | |
| | ISRAEL | | | 2472 | | |
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| | | | | NOTIFICATION DATE | DELIVERY MODE | |
| | | | | 08/24/2020 | ELECTRONIC | |

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte DAVID LEVI and SHAVIT BARUCH

Application 14/166,906 Technology Center 2400

Before JOHN A. JEFFERY, CARL L. SILVERMAN, and JAMES W. DEJMEK, *Administrative Patent Judges*.

JEFFERY, Administrative Patent Judge.

DECISION ON APPEAL

Under 35 U.S.C. § 134(a), Appellant¹ appeals from the Examiner's decision to reject claims 1–32. We have jurisdiction under 35 U.S.C. § 6(b). We REVERSE.

¹ We use the word "Appellant" to refer to "applicant" as defined in 37 C.F.R. § 1.42 (2017). Appellant identifies the real party in interest as Ethernity Networks Ltd. Appeal Br. 3.

STATEMENT OF THE CASE

Appellant's invention distributes high data traffic over multiple wireless links to form a high-bandwidth wireless backbone. To this end, a source router receives multiple data streams and transmits them wirelessly to destination routers that, in turn, send stream fragments to a gateway that reconstructs and outputs the streams. *See generally* Spec. 13–16, 78. Claim 1 is illustrative:

1. A data distribution system, comprising:

a source router;

destination routers; and

a gateway;

wherein the source router is arranged to receive multiple data streams and wirelessly transmit the multiple data streams over multiple source router output wireless communication links towards the destination routers; wherein the destination routers are arranged to wirelessly receive the multiple data streams over destination routers input wireless links and to transmit the multiple data streams to the gateway;

wherein each destination router is configured to receive at least a fragment of a data stream and to send the at least fragment of the data stream, directly or via one or more other destination routers, to the gateway; and

wherein the gateway is arranged to reconstruct the multiple data streams and output from the data distribution system the multiple data streams over one or more gateway output links.

THE REJECTIONS

The Examiner rejected claims 1 and 17 under 35 U.S.C. § 103 as unpatentable over Satapathy (US 7,865,185 B1; issued Jan. 4, 2011). Ans. $3-4.^2$

The Examiner rejected claims 2, 3, 7, 9, 11, 16, 18, 19, 23, 25, 27, and 32 under 35 U.S.C. § 103 as unpatentable over Satapathy and Krishnaswamy (US 2013/0064198 A1; published Mar. 14, 2013). Ans. 4–6.

The Examiner rejected claims 4 and 20 under 35 U.S.C. § 103 as unpatentable over Satapathy, Krishnaswamy, and Lee (US 2014/0064249 A1; published Mar. 6, 2014). Ans. 6–7.

The Examiner rejected claims 5, 6, 8, 21, 22, and 24 under 35 U.S.C. § 103 as unpatentable over Satapathy, Krishnaswamy, and Pasotti (US 2014/0050087 A1; published Feb. 20, 2014). Ans. 7–8.

The Examiner rejected claims 10 and 26 under 35 U.S.C. § 103 as unpatentable over Satapathy, Krishnaswamy, and Antoniou (US 2003/0216141 A1; published Nov. 20, 2003). Ans. 8.

The Examiner rejected claims 12, 13, 28, and 29 under 35 U.S.C. § 103 as unpatentable over Satapathy, Krishnaswamy, Antoniou, and Hampel (US 2013/0195004 A1; published Aug. 1, 2013). Ans. 8–9.

The Examiner rejected claims 14 and 30 under 35 U.S.C. § 103 as unpatentable over Satapathy, Krishnaswamy, and Chandra (US 2009/0088089 A1; published Apr. 2, 2009). Ans. 10.

² Throughout this opinion, we refer to (1) the Appeal Brief filed July 15, 2018 ("Appeal Br."); (2) the Examiner's Answer mailed February 5, 2019 ("Ans."); and (3) the Reply Brief filed April 4, 2019 ("Reply Br.").

The Examiner rejected claims 15 and 31 under 35 U.S.C. § 103 as unpatentable over Satapathy, Krishnaswamy, and Kovvali (US 2015/0124622 A1; published May 7, 2015). Ans. 10.

THE OBVIOUSNESS REJECTION OVER SATAPATHY

The Examiner finds that Satapathy discloses every recited element of independent claim 1, but does not transmit or receive multiple data streams wirelessly. Ans. 3–4, 11. The Examiner, however, concludes that it would have been obvious to substitute Satapathy's wireline interface with a wireless interface—a simple substitution of one known element for another to produce a predictable result. Ans. 4, 11–12.

Appellant argues that because Satapathy uses both wired and wireless communication—a dual communication capability that improves earlier approaches that were limited to just one communication type—Satapathy teaches away from using only wireless interfaces as the Examiner proposes. Appeal Br. 13–16; Reply Br. 2–3.

ISSUE

Under § 103, has the Examiner erred in rejecting claim 1 by finding that Satapathy would have taught or suggested transmitting and receiving multiple data streams wirelessly? This issue turns on whether Satapathy teaches away from substituting the disclosed wired interfaces with wireless interfaces as the Examiner proposes.

ANALYSIS

On this record, we agree with Appellant that the Examiner's proposal to substitute a wireless interface for Satapathy's wired interface is problematic, for this proposed substitution runs counter to the very teachings of the reference and, therefore, teaches away from that approach.

Satapathy explains in the Background section that service providers used wireless *or* wireline means to communicate with an access device, such as a telephone or computer. Satapathy col. 1, ll. 25–33. Our emphasis on the term "or" underscores that wireless and wireline approaches were used *alternatively* in the prior art. *See id*. Consequently, associated systems employing those alternatives were limited by each alternatives' respective protocols, equipment, software, and distances between access and switching devices. Satapathy col. 1, ll. 33–38.

Satapathy's invention, however, overcomes these drawbacks by *combining* wireless *and* wireline access technologies to improve capacity, throughput, accessibility, and effectiveness. Satapathy col. 1, ll. 40–43; col. 2, ll. 52–60; Abstract. As Satapathy explains, this combination of wireless and wireline technologies improves systems that use only a single access technology by enabling more effective and efficient communications, especially in areas where a single access technology has limited capacity or lacks ideal connectivity. Satapathy col. 2, ll. 52–60; col. 3, ll. 4–6.

Given this improvement, to suggest that it would have somehow been obvious to substitute Satapathy's disclosed wireline interface with a wireless interface to yield a single wireless access technology as the Examiner proposes (Final Act. 4; Ans. 11–12) is diametrically opposite to what Satapathy teaches and, therefore, is untenable on this record. It is well

settled that a reference teaches away from the claimed invention when the reference criticizes, discredits, or otherwise discourages investigation into the claimed invention. *See Norgren Inc. v. Int'l Trade Comm'n*, 699 F.3d 1317, 1326 (Fed. Cir. 2012); *see also In re Kahn*, 441 F.3d 977, 990 (Fed. Cir. 2006).

That is the case here, at least regarding using solely wireless access technology in Satapathy with the Examiner's proposed substitution. In other words, the Examiner's proposed substitution negates the very benefits achieved by Satapathy's invention, namely the improved capacity, throughput, accessibility, and effectiveness that is realized by using both wireless and wired technologies together. *See* Satapathy col. 1, ll. 40–43; col. 2, ll. 52–60; Abstract.

Although substituting wireless communication technology in lieu of wired technology is not a leap of inventiveness, such a substitution is nevertheless unjustified where, as here, the cited prior art teaches away from that substitution.

The Examiner's statement that Appellant does not explain how *Salkintzis or Katz* criticizes, discredits, or discourages investigation into the claimed invention (Ans. 12) is puzzling, for these references were not cited, nor has the Examiner explained their relevance here. In any event, even if this inartful statement was intended to refer to Satapathy, it is unavailing given Satapathy's teaching away from the Examiner's proposed substitution as noted above.

Therefore, we are persuaded that the Examiner erred in rejecting claims 1 and 17.

THE OTHER OBVIOUSNESS REJECTIONS

Because the Examiner has not shown that the cited prior art cures the deficiencies noted above regarding the rejection of the independent claims, we do not sustain the obviousness rejections of the dependent claims (Ans. 4–10) for similar reasons.

CONCLUSION In summary:

| Claims | 35 U.S.C. § | Reference(s)/Basis | Affirmed | Reversed |
|-----------------|-------------|--------------------|----------|--------------|
| Rejected | 3 | () | | |
| 1, 17 | 103 | Satapathy | | 1, 17 |
| 2, 3, 7, 9, 11, | 103 | Satapathy, | | 2, 3, 7, 9, |
| 16, 18, 19, | | Krishnaswamy | | 11, 16, 18, |
| 23, 25, 27, | | | | 19, 23, 25, |
| 32 | | | | 27, 32 |
| 4, 20 | 103 | Satapathy, | | 4, 20 |
| | | Krishnaswamy, | | |
| | | Lee | | |
| 5, 6, 8, 21, | 103 | Satapathy, | | 5, 6, 8, 21, |
| 22, 24 | | Krishnaswamy, | | 22, 24 |
| | | Pasotti | | |
| 10, 26 | 103 | Satapathy, | | 10, 26 |
| | | Krishnaswamy, | | |
| | | Antoniou | | |
| 12, 13, 28, | 103 | Satapathy, | | 12, 13, 28, |
| 29 | | Krishnaswamy, | | 29 |
| | | Antoniou, Hampel | | |
| 14, 30 | 103 | Satapathy, | | 14, 30 |
| | | Krishnaswamy, | | |
| | | Chandra | | |
| 15, 31 | 103 | Satapathy, | | 15, 31 |
| | | Krishnaswamy, | | |
| | | Kovvali | | |
| Overall | | | | 1–32 |
| Outcome | | | | |

REVERSED